



IN THE UNITED STATES PATENT AND PATENT  
TRADEMARK OFFICE

Applicant(s): Misuo Sugiyama; Hatsuyuki Arai  
Reissue of  
Patent No.: 5,605,499  
Issued: February 25, 1997  
Title: FLATTENING METHOD AND  
FLATTENING APPARATUS OF A  
SEMICONDUCTOR DEVICE

Docket No.: 30598.0004  
Application No.: 08/960,943  
Filed: October 29, 1997  
Examiner: George Nguyen

**SUPPLEMENTAL REISSUE DECLARATION**  
**OF HATSUYUKI ARAI (37.CER.1.175)**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Dear Sir/Madam:

I, **MISUO SUGIYAMA**, hereby declare as follows:

1. My residence, post office address and citizenship are as stated below next to my name.
2. I believe that I am an original, first, and joint inventor of the invention described and claimed in U.S. patent no. 5,605,499 which issued on February 25, 1997, in the Reissue Application No. 08/960,431 filed April 7, 1998, including the Preliminary Amendment filed therewith, and the Amendments and Response to the Office Action of July 12, 1999 filed herewith, for which invention a reissue of U.S. patent no. 5,605,499 is solicited.
3. I have reviewed and understand the contents of the captioned reissue application, including the claims as amended by the Preliminary Amendment and the enclosed Amendments and Response.

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4. I verily believe that the original patent, namely, U.S. patent no. 5,605,499, is wholly or partly inoperative or invalid by reason of our claiming less than we had a right to claim in the patent.

5. The errors in, and insufficiency of, the originally issued claims relate to the existence of an unnecessary limitation in claim 1 that the tool for conditioning (*i.e.*, for forming the "fluff" on) the polishing cloth have "an annular shape." As described in the specification, and as one skilled in the art will appreciate, this limitation of shape of the conditioning tool is not necessary. Any configuration of the tool which effects conditioning of the polishing cloth will suffice. Accordingly, this limitation unnecessarily limits claim 1.

6. As a result of discussions with attorney James Farmer, in-house patent counsel for SpeedFam Corporation, and with guidance from attorney R. Lee Fraley of the law firm of Snell & Wilmer, outside patent counsel for SpeedFam Corporation and SpeedFam Company Limited, which discussions occurred between October 1999 and the present date, I now realize that claim 1 was also drafted too narrowly and that the limitations discussed above, and in the Reissue Declaration of April 7, 1998, were unnecessary for patentability over the art of record.

7. I understand each of the recited errors in originally issued claims 1, 6 and 11 and agree that we claimed less than we had a right to claim in the original patent. Because I was not aware that claims 1, 6, and 11 as amended on May 17, 1997 were unnecessarily narrow, these errors arose without any deceptive intention on my part.

8. The erroneous and unnecessary limitations present in issued claims 1, 6 and 11 are removed from the claims by the Preliminary Amendment filed April 7, 1998 and the Amendments and Response filed herewith. The amendments to claims 1, 6 and 11 are fully supported in the original patent specification (column 9, lines 61-67) and hence, add no new matter to the patent.

9. I acknowledge the duty to disclose to the United States Patent Office all information known to me to be material to patentability in accordance with 37 C.F.R. §1.56.

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10. I declare further that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Signature: *Misuo Sugiyama*  
**MISUO SUGIYAMA**

Date: *Dec. 10. 99.*

Citizenship: **JAPAN**

City of Residence: **Ayase-shi**

Country of Residence: **JAPAN**

Post Office Address: c/o Speedfam Company Limited  
2647, Hayakawa, Ayase-shi, Kanagawa

Please send all further correspondence to Snell & Wilmer L.L.P. at the following address:

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**ATTENTION: R. Lee Fraley**

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Signature: *Hatsuyuki Arai*  
**HATSUYUKI ARAI**

Date: *Dec. 10. 99*

Citizenship: JAPAN

City of Residence: Ayase-shi

Country of Residence: JAPAN

Post Office Address: c/o Speedfam Company Limited  
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